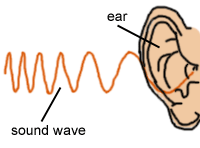
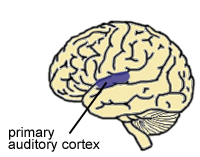
**Traditional Instructional Media**

* Different ways of presenting a material can emphasize different meanings of a text
* Dr. King’s “I Have a Dream Speech” is more powerful when heard or watched. It is more easily recognized when the voice is heard.
* By reading his speech, one who is not fully familiar with the speech may only recognize it as Dr. King’s speech when they get to the “I have a dream” part
* When hearing the speech, one can automatically recognize that it is Dr. King’s Voice
* Reading texts displays the powerful and evocative words
* Hearing passages allows for the hearing of volume changes, emotional changes, pauses, and pitch tools to better convey the meaning of the speech
* Viewing and hearing a speech allows the viewer to actually see the emotional facial changes of the speaker, hand cues, and also voice changes
* All different ways of learning the same speech are effective but some ways are more effective than others

**How We Process Sound**

* Any disturbance that vibrates the sound waves is considered a sound
* In our brain, we have recognition networks that have different processes in understanding and receiving sounds
* How we hear sounds:

1. Air pressure pounds on our eardrums when a wave of energy hits our eardrums
2. Energy is then transformed into patterns of nerve impulses (processing modules)
3. Our auditory cortex recognizes this as a sound



* Patterns of sound are *transient*
  + The first syllable of the word is gone before you pronounce the second syllable
  + For example:
    - “object” – the first syllable is “ob” and the second syllable is “ject”
    - “ob” disappears before you say “ject”
    - Try this with me
* Digital Recordings



* + This is the only way that we can “see” a sound wave
  + It is impossible to create a still shot of sound
* Time is inseparable from sound
  + The brain can only respond to the number of waves per second
  + You cannot freeze a sound in time, only record it and play it back
  + The time that the sound took place in is already past
* One of human’s most extraordinary traits is recognize meaning of vocalizations from speech
  + Speech is a very rich subgroup of sound
  + Human vocal cords create complex patterns